

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Doan et al.	Group Art Unit: 1795
Application No: 10/799,361	Examiner: Band, Michael A.
Confirmation No: 8504	Attorney Docket No: 009001 USA/AGS/SPARES/DP
Filing Date: March 12, 2004	
Title: REFURBISHMENT OF SPUTTERING TARGETS	January 16, 2009 San Francisco, California

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

VIA ELECTRONIC FILING

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner Band:

This Comments on Statement of Reasons for Allowance is in response to the "Reasons for Allowance" provided by the Examiner in the Notice of Allowability attached to the Notice of Allowance and Fees Due statement mailed on November 3, 2008.

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450; or facsimile transmitted to the U.S. Patent and Trademark Office at (571) 273-8300; or electronically filed via PAIR, on the date shown below.

By:


Melanie Hitchcock

Date:

January 16, 2009

REMARKS

Applicant thanks the Examiner for indicating allowance of all the pending claims, namely claims 1, 4-24, 26-28, 30-32, 34-36, 38-40.

The Examiner provided the following statement of reasons for allowance:

"... [C]laims 1 and 4-23, 24, and 26-27 of the invention as claimed are not shown in the prior art especially with regard to generating an electrical arc between first and second electrodes in the process zone, wherein at least one of the first and second electrodes comprises a consumable metal wire that forms liquefied metal. Claims 28, 30-32, 34-36, and 38-40 of the invention as claimed are not shown in the prior art especially with regard to generating an electrical arc in the process zone between the surface of the sputter target and a consumable metal wire (or electrode) by applying a voltage to the sputter target and the consumable metal wire (or electrode)."

However, the present claims contain several independent claims, each of which has independently distinguishable features which render the claim patentable over the cited art.

For example, claim 24 recites:

24. A method of refurbishing a deposition target having a pre-sputtered surface with a sputtered depression, the method comprising:

- (a) providing the pre-sputtered surface of the deposition target comprising the sputtered depression, in a process zone;
- (b) generating an electrical arc in the process zone between first and second electrodes by applying a voltage to the electrodes, at least one of the first and second electrodes comprising a consumable metal wire, thereby at least partially liquefying the consumable metal wire to form liquefied metal; and
- (c) directing liquefied metal into the sputtered depression of the deposition target to at least partially fill the sputtered depression with the liquefied metal by injecting a pressurized gas into the process zone to direct the liquefied metal into the sputtered depression, thereby forming a coating comprising the metal in the sputtered depression.

Similarly, claim 28 recites:

28. A method of refurbishing a deposition target having a pre-sputtered surface with a sputtered depression, the method comprising:

- (a) providing the pre-sputtered surface of the deposition target comprising the sputtered depression, in a process zone;
- (b) generating an electrical arc in the process zone between the surface of the target and a consumable metal wire by applying a voltage to the target and the consumable metal wire, thereby at least partially liquefying the consumable metal wire in the process zone to form a liquefied metal; and
- (c) directing liquefied metal into the sputtered depression of the deposition target to at least partially fill the sputtered depression with the liquefied metal by injecting a pressurized gas into the process zone to direct the liquefied metal into the sputtered depression, thereby forming a coating comprising the metal in the sputtered depression.

Similarly, claim 32 recites:

32. A method of refurbishing a deposition target having a pre-sputtered surface with a sputtered depression, the method comprising:

- (a) providing the pre-sputtered surface of the deposition target comprising the sputtered depression, in a process zone;
- (b) generating an electrical arc in the process zone between the surface of the target and an electrode by applying a voltage to the target and the electrode;
- (c) inserting a consumable metal wire into the process zone to at least partially liquefy the consumable metal wire in the process zone to form liquefied metal; and
- (d) directing liquefied metal into the sputtered depression of the deposition target to at least partially fill the sputtered depression with the liquefied metal

by injecting a pressurized gas into the process zone to direct the liquefied metal into the sputtered depression, thereby forming a coating comprising the metal in the sputtered depression.

Moreover, claim 36, as amended in the concurrently filed Rule 312 amendment, recites:

36. A method of refurbishing a deposition target having a pre-sputtered surface with a sputtered depression, the method comprising:

- (a) providing the pre-sputtered surface of the deposition target comprising the sputtered depression, in a process zone;
- (b) generating an electrical arc in the process zone between the surface of the sputtering target and an electrode by applying a voltage to the target and the electrode;
- (c) passing the electrical arc through a nozzle to form a plasma jet in the process zone;
- (d) directing liquefied metal into the sputtered depression of the deposition target to at least partially fill the sputtered depression with the liquefied metal by inserting a consumable metal wire into the process zone to at least partially liquefy the consumable metal wire in the process zone to form liquefied metal that is directed into the sputtered depression of the deposition target by the plasma jet to at least partially fill the sputtered depression with the liquefied metal; and
- (e) injecting a pressurized gas into the process zone to reduce contamination of the liquefied metal from the environment.

Thus each of the independent claims provided in the present application is independently novel and non-obvious over the cited references.

Accordingly, the language used by the Examiner in the reasons for allowance should not be used to limit the scope of the other independent claims in the present application, as each independent claim recites an independently patentable element or combination of elements.

The Examiner is requested to accept the present Comments on Statement of Reasons for Allowance to explain the Allowability of each independent claim in the present set of claims.

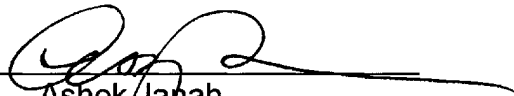
Should the Examiner disagree with the above-discussed remarks or have any questions regarding the same, the Examiner is respectfully requested to telephone Applicant's representative at the number listed below.

Respectfully submitted,

JANAH & ASSOCIATES, P.C.

Date: January 16, 2009

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